

Figure 2,a (PRIOR ART)

"Open-cell" implementation of a trenched DMOS
power transistor (CALMA hard copy, active region).
Siliconix, Inc., 1987.

read + understood QXW August 10, 1988
read and understood Randolph D. Webb August 11, 1988

B

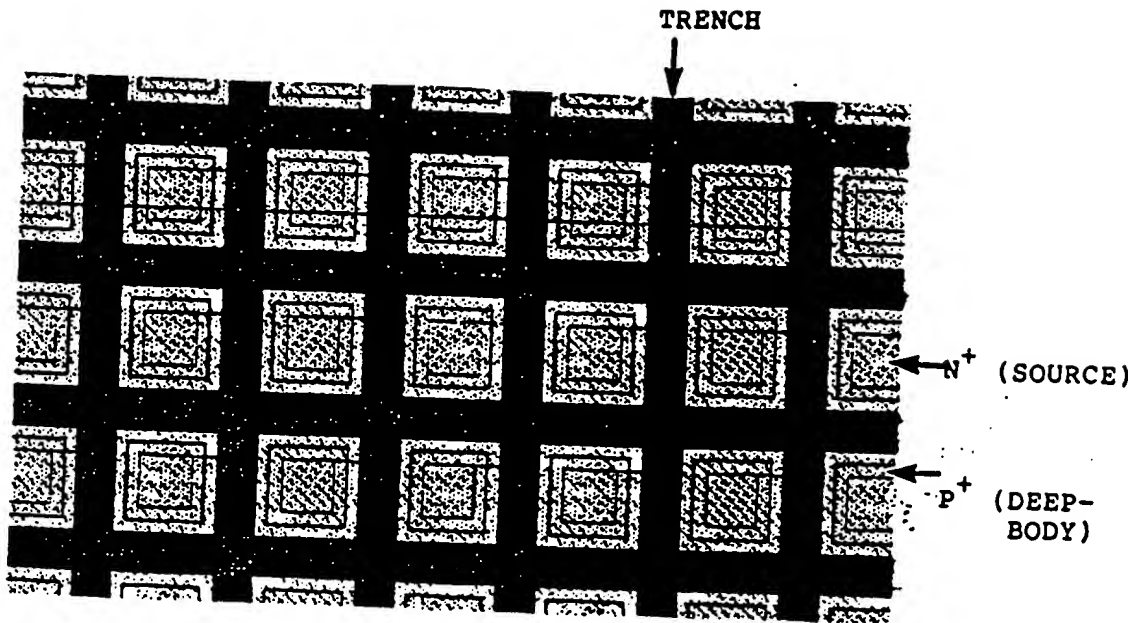


Figure 2,b (PRIOR ART)

"Closed-cell" implementation of a trench DMOS power transistor (CALMA hard copy, active region).
Siliconix, Inc., 1987.

read + understo. J. Q. K. W. H. August 10, 1988
read and understood Randolph D. Loh August 11, 1988

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A2.4/QD5.3

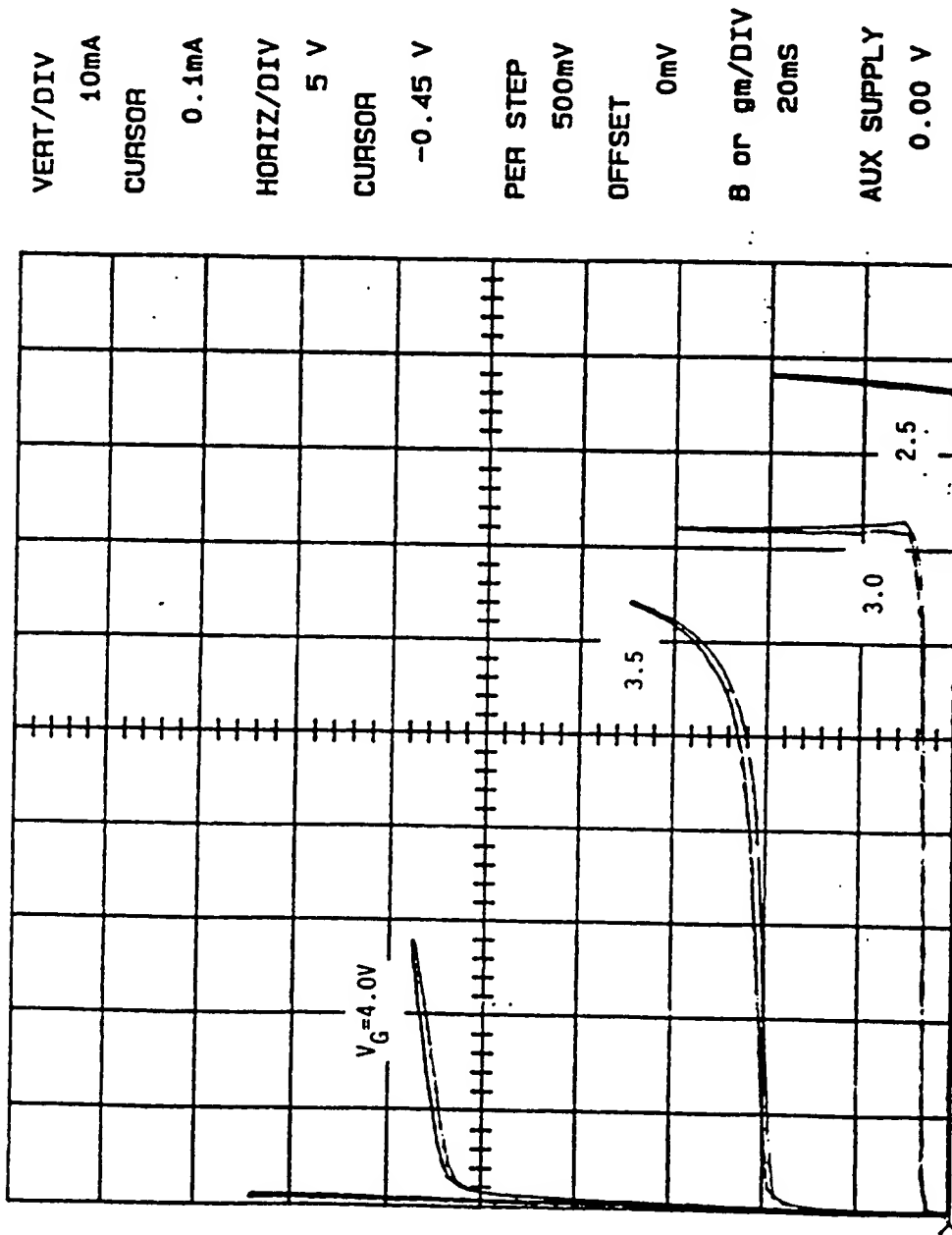


Figure 3,a

Output I-V characteristics of an experimental "open-cell" trench MOS transistor having distant body contacts, perpendicular to the trenches. Siliconix, Inc., 1988.

(Prior Art)

read & understood August 10, 1988
read and understood August 11, 1988 R. D. H.

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A2.1/QD5.3

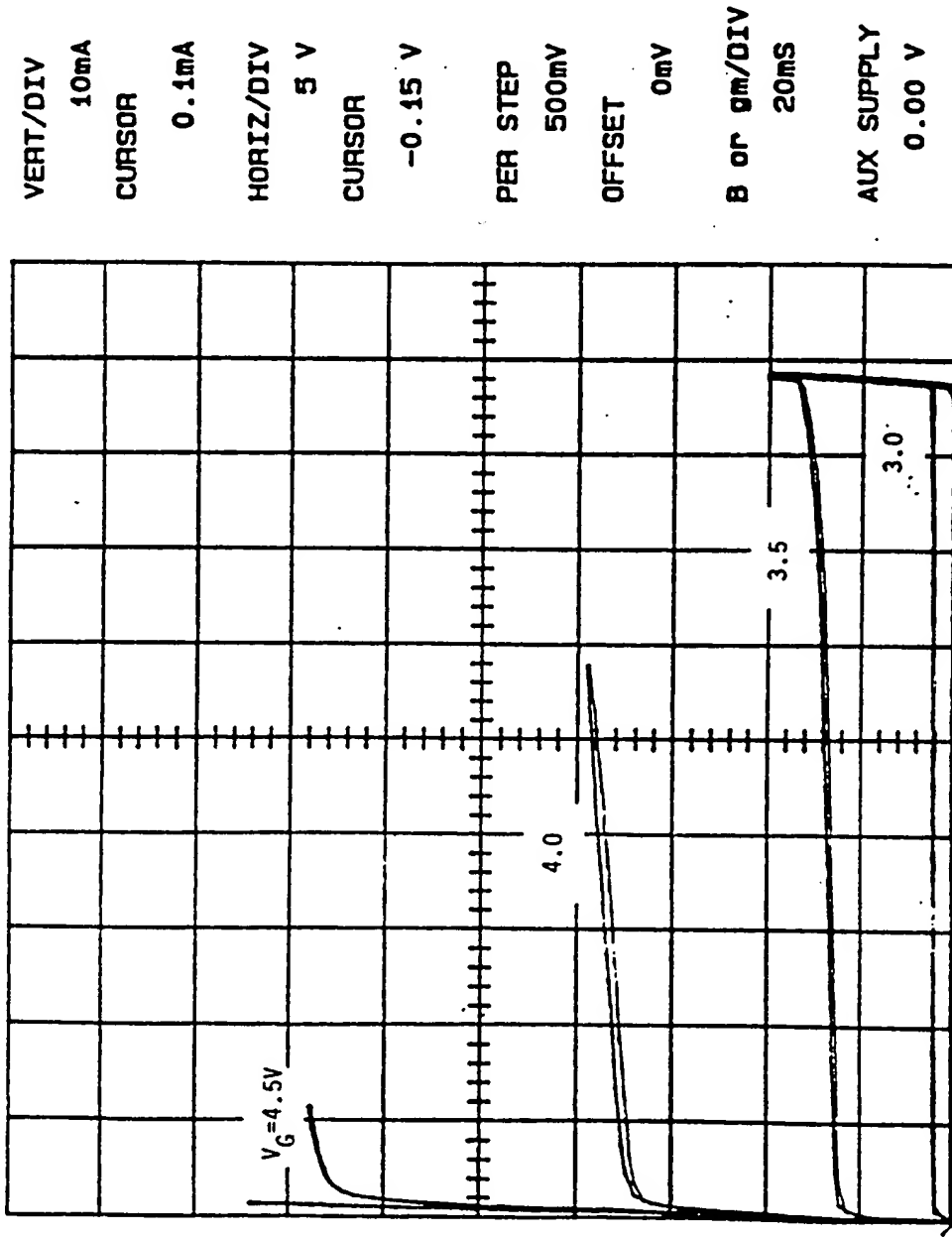


Figure 3,b

Output I-V characteristics of an experimental "open-cell" transistors having closely-spaced body contacts, perpendicular to the trenches. Siliconix, Inc., 1988.

(PRIOR ART)

read & understand Q. K. W. August 10, 1988
read and understand Randolph D. Lee August 11, 1988

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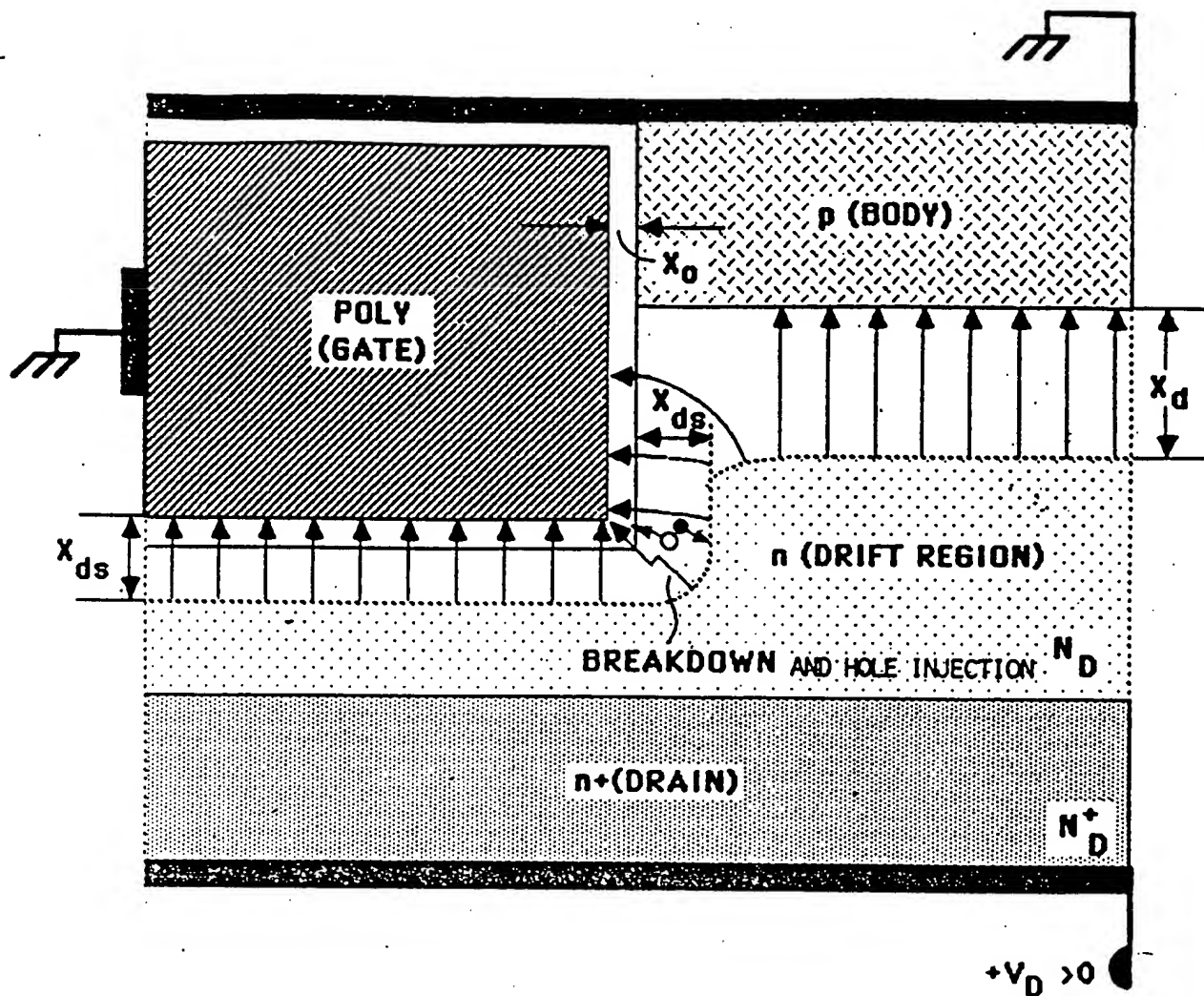


Figure 4 (PRIOR ART)

Qualitative description of the electric-field structure in a trench DMOS transistor having no deep-body profile provision. BVDSS biasing, source junction omitted.

read & under, too. Q. K. H. August 10, 1988
 read and understood Randolph D. M. August 11, 1988

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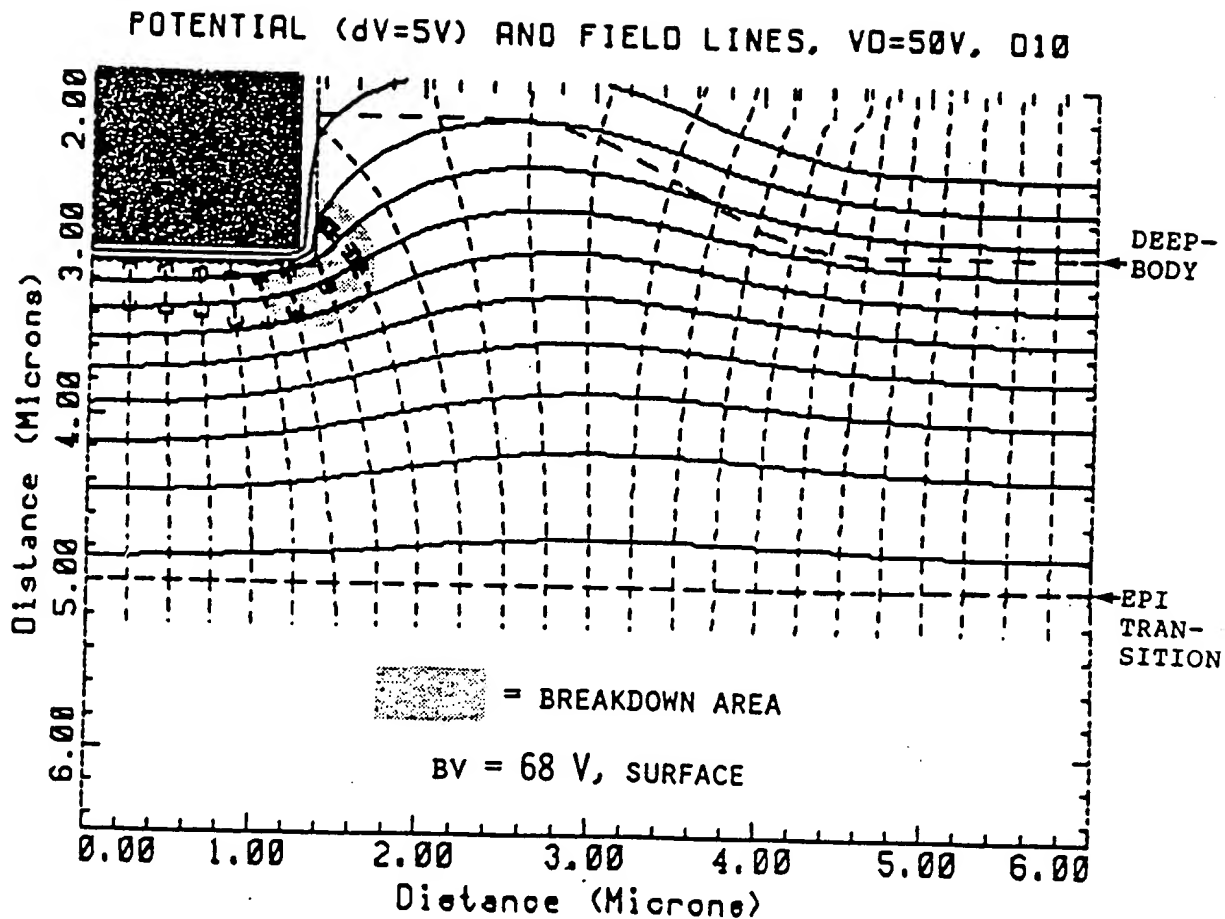


Figure 5 (PRIOR ART)

2-D computer simulation of the BVDSS operation of a trench MOS transistor having the deep body junction shallower than the trench. Drain breakdown takes place beneath the trench surface.

read & understood Q-K WJA August 10, 1988
 read and understood Ruchoff D. WJA August 14, 1988

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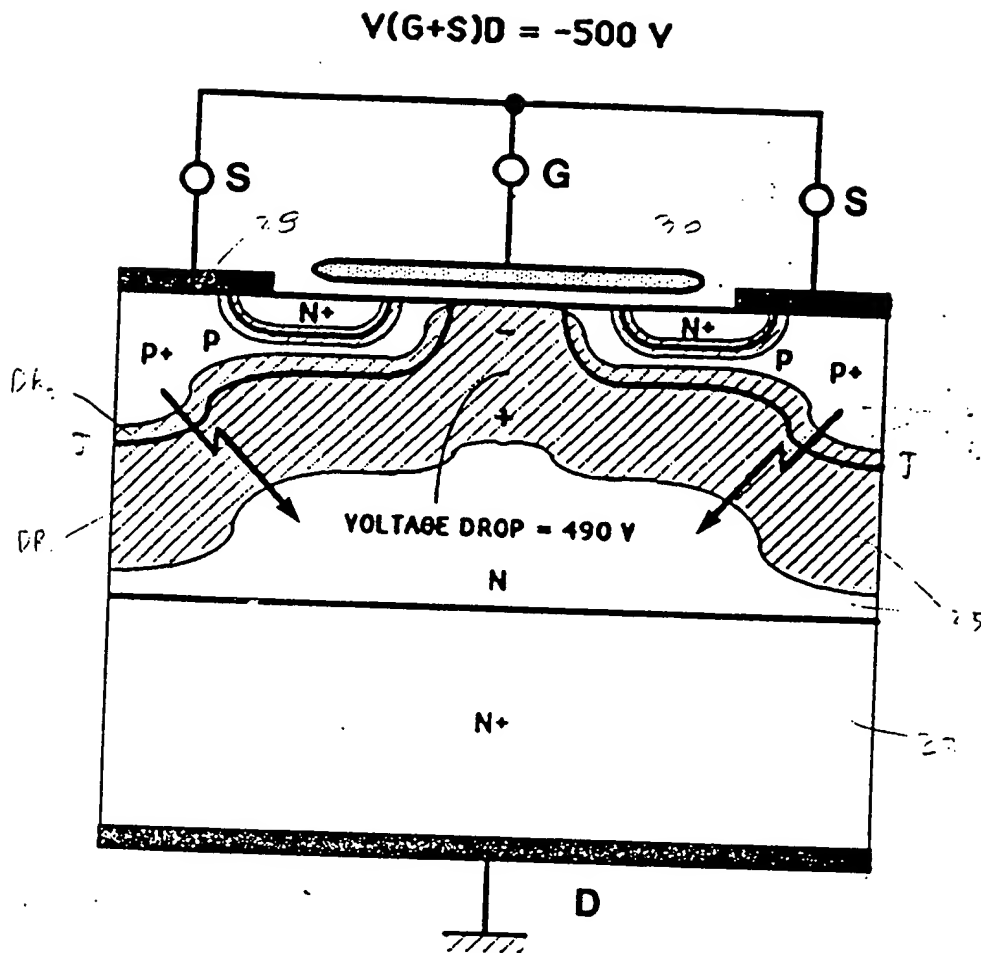


Figure 6 (PRIOR ART)

Junction and depletion-region topology
of a planar DMOS transistor biased in the BVDSS condition.

rec'd + ... t... Q. K. V. A. Aug. 10, 1988
rec'd at ... Randall D. ... Aug. 14, 1988

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2-D OXIDATION SQUARE-CELL DESIGN

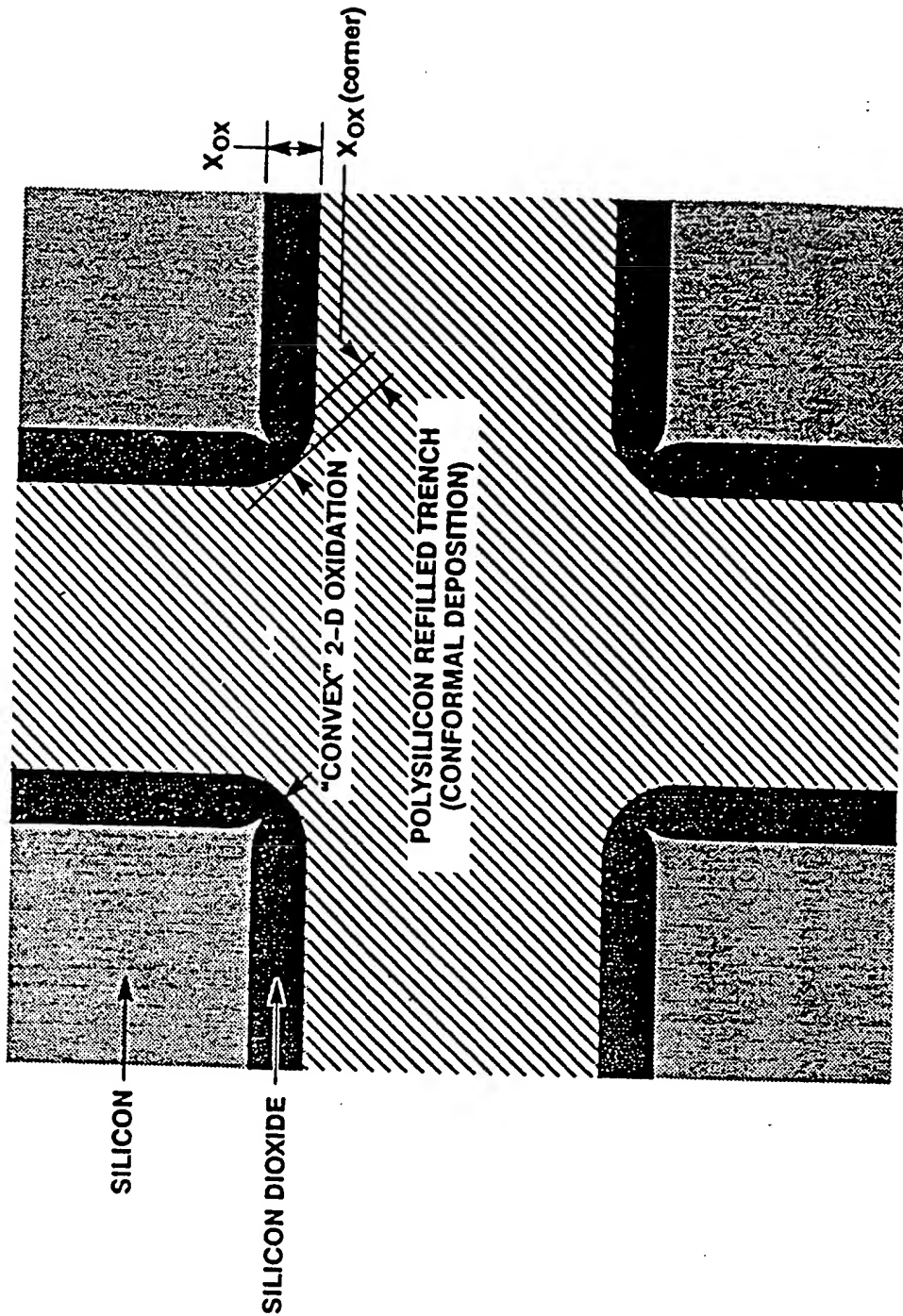


Figure 7 (Prior Art)
Qualitative description of the oxide profile
at a rectangular trench intersection.

read & understood QJWA August 10, 1988
read as understood Darrell Doherty August 4, 1988

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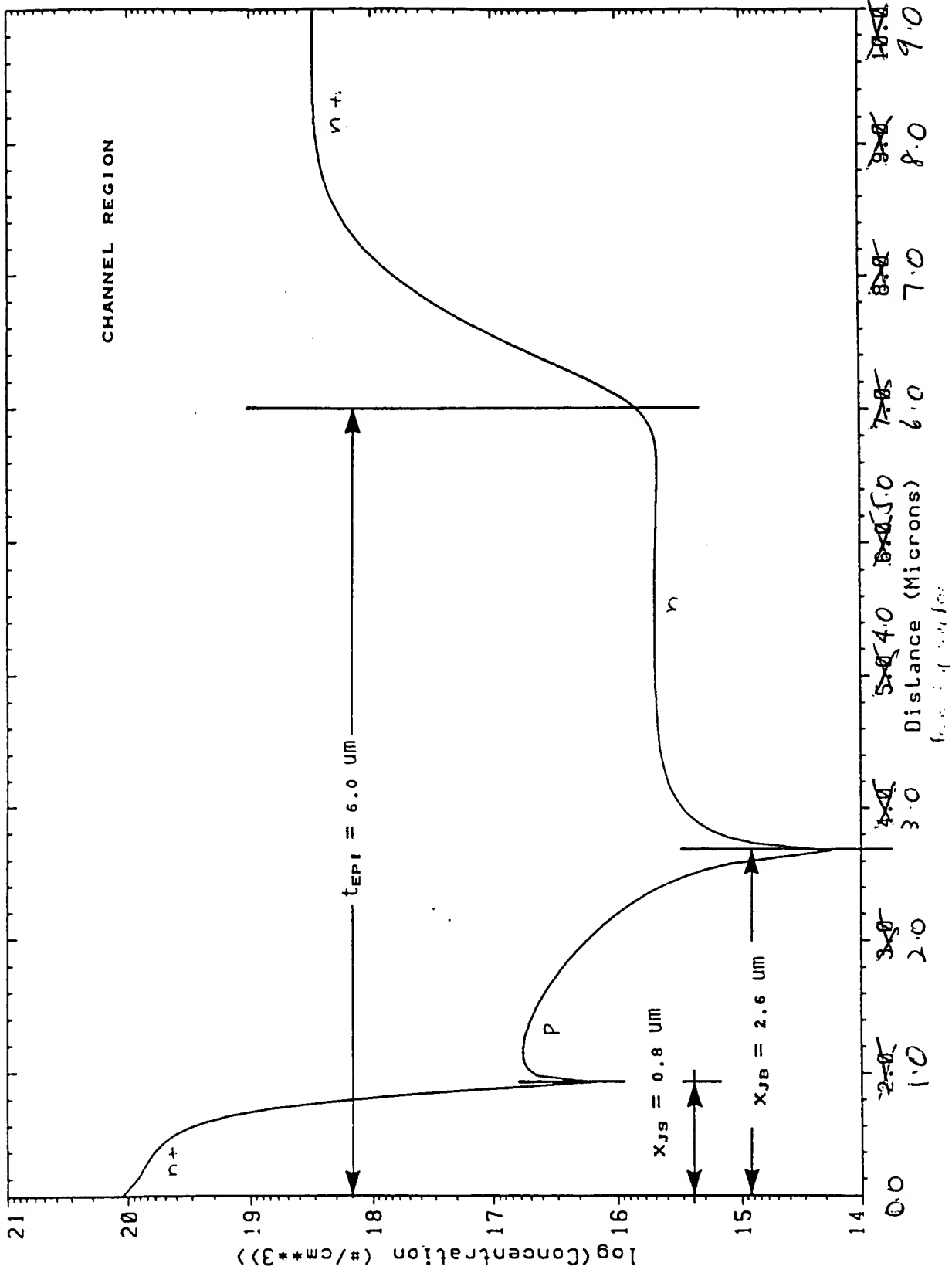


Fig. 11

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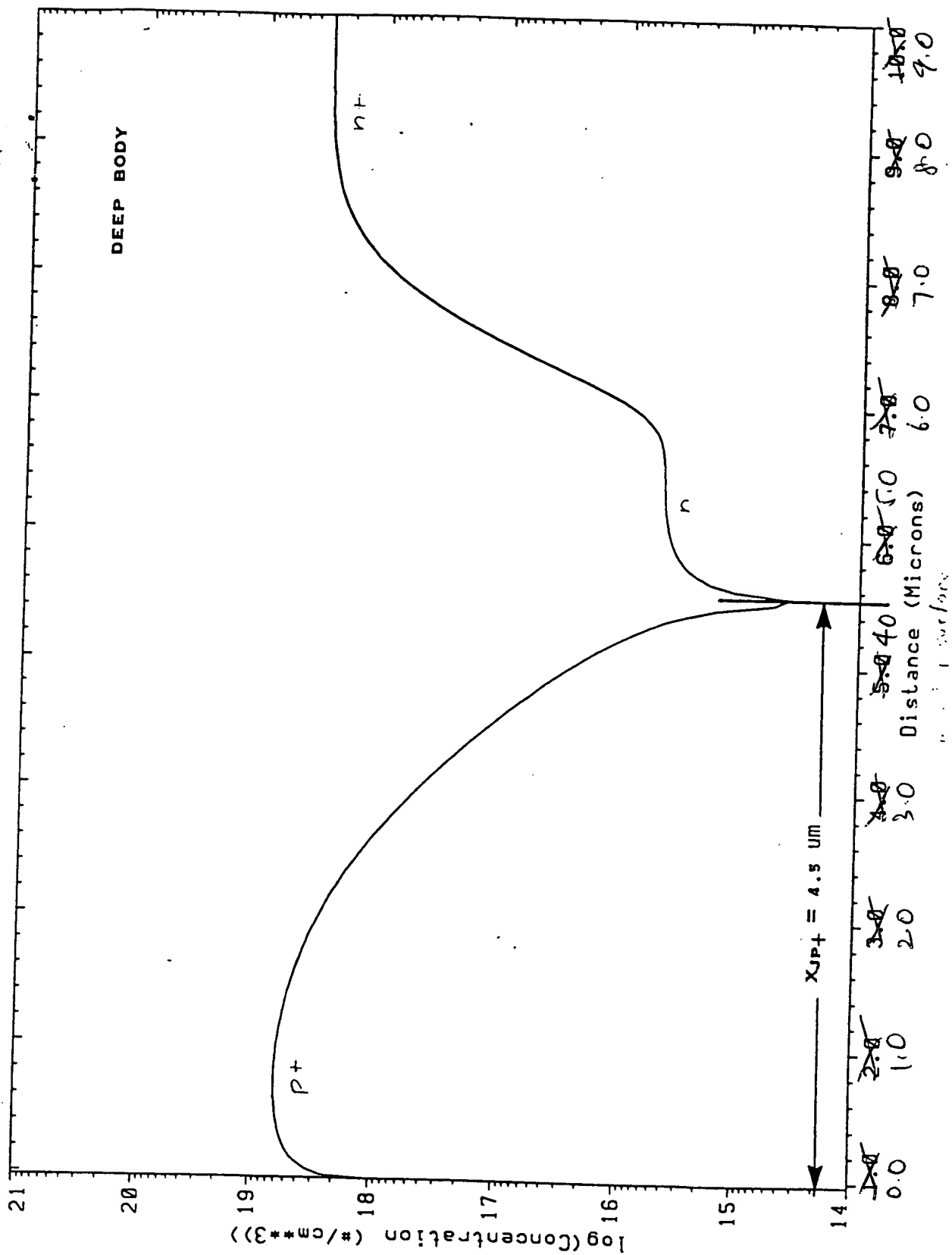


Fig. 12

3

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